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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,244

03/26/2004

Raymond Aubin

111-032

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34645 7590 05/29/2009  
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EXAMINER

NGUYEN, THANH T

ART UNIT

PAPER NUMBER

2444

NOTIFICATION DATE

DELIVERY MODE

05/29/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/810,244	<b>Applicant(s)</b> AUBIN ET AL.	
	<b>Examiner</b> THANH TAMMY NGUYEN	<b>Art Unit</b> 2444	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-9,11-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-9, 11-15, and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |



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## Detailed Office Action

1. This action is in response to the amendment filed on February 9, 2009.
2. Claims 1, 3, 5-9, 11-15, and 17-20 are pending.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dighe et al., (hereinafter Highe) Publication No. US 2002/0097725 A1 in view of Burwell Goode., (hereinafter Burwell) U.S. Patent No. 7,327,675.
5. As to claims 1, 19, Dighe discloses the invention as claimed, Dighe discloses including a method of assigning and allocating network resources to layer 1 Virtual Private Networks (L1-VPNs), on a communication network, the method comprising the steps of: collecting information about available resources on the network [paragraphs 0042 and 0044] (available resource);

designating a first subset of the resources as dedicated L1-VPN resources, [paragraph 0034] (VPN-1, spanning through switches S1, S2, S3 and S4, is allocated to customer-1); and designating a second subset of the resources as shared L1-VPN resources, [paragraph 0034] (VPN-2, which spans through S1, S3 and S4, is assigned to customer-2, who has presence at site-1 and site-3). However, Dighe does not explicitly disclose at least a second portion of the second subset of the resources being assigned to the first L1-VPN and to a first L1-VPN.

6. In the same field of endeavor, Goode discloses (e.g., Fairness of capacity allocation for an MPLS-BASED VPN). Goode discloses at least a first portion of the first subset of the resources being assigned to a first L1-VPN, and at least a second portion of the second subset of the resources being assigned to the first L1-VPN and to a first L1-VPN [col.8, lines 7-36].
7. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Goode's teachings of a Fairness of capacity allocation for an MPLS-BASED VPN with the teachings of Dighe, for the purpose of providing fairness of capacity allocation in a network [col.6, lines 6, lines 25-36].
8. As to claim 3, Dighe discloses the method of claim 2, wherein the resources assigned to the first L1-VPN are dedicated to the first L1-VPN [paragraph 0034] (VPN-2, which spans through S1, S3 and S4, is assigned to customer-2, who has presence at site-1 and site-3).

9. As to claim 5, Dighe discloses the method of claim 4, wherein the first L1-VPN and second L1-VPN are a first group of L1-VPNs, and wherein the shared resources assigned to group of L1-VPN subscribers may be used by one of the group members at a time [paragraph 0044].
10. As to claim 6, Dighe discloses the method of claim 1, further comprising designating a subset of the resources as public L1-VPN resources [figure.1].
11. As to claim 7, Dighe discloses the method of claim 1, wherein resources not designated as dedicated L1-VPN resources and not designated as shared L1-VPN resources are public L1-VPN resources [figure.2].
12. As to claim 8, Dighe discloses the method of claim 1, further comprising the step of communicating information associated with the steps of designating the first subset of the resources as dedicated L1-VPN resources; and designating the second subset of the resources as shared L1-VPN resources to network elements to enable those resources to be allocated on the communication network [paragraph 0042-0064].
13. As to claim 9, Dighe discloses the invention as claimed, Dighe teaches including the method of claim 1, further comprising the steps of: receiving a request associated with the first L1-VPN for network resources [paragraph 0005, 0019, and 0042]; and allocating network resources from the first portion of the first subset to fulfill the request [paragraph 0013, 0018, 0043].
14. As to claim 11, Dighe discloses the method of claim 9, wherein the step of allocating assigned network resources comprises determining current assignment information for the L1-VPN to determine which network

resources have been assigned to the L1-VPN, and allocating network resources to the L1-VPN from the first portion of the first subset if those network resources have not been previously assigned to the L1-VPN [paragraph 0042-0064].

15. As to claim 12, Dighe discloses the method of claim 9, further comprising designating a third subset of the resource as public L1-VPN resources, and wherein the step of allocating assigned network resources comprises determining current assignment information for the L1-VPN to determine which of the second portion of the second subset of the network resources have been assigned to the L1-VPN, and determining which of the assigned network resources are currently in use [paragraph 0036].
16. As to claim 13, Dighe discloses the method of claim 12, wherein the step of allocating further comprises selecting network resources from the second portion of the second subset that have been assigned to the L1-VPN and which are not currently in use to fulfill the request, and selecting public network resources to augment the assigned resources to fulfill the request if necessary [paragraph 0045].
17. As to claim 14, Dighe does not explicitly disclose the first L1-VPN and second L1-VPN are a first group of L1-VPNs, and wherein the step of allocating comprises prioritizing between L1-VPNs to enable the first L1-VPNs to obtain L1-VPN resources associated with the second portion of the second subset that are currently assigned to a third L1-VPN that is not part of the first group of L1-VPNs.

18. In the same field of endeavor, Goode discloses (e.g., Fairness of capacity allocation for an MPLS-BASED VPN). Goode discloses the first L1-VPN and second L1-VPN are a first group of L1-VPNs, and wherein the step of allocating comprises prioritizing between L1-VPNs to enable the first L1-VPNs to obtain L1-VPN resources associated with the second portion of the second subset that are currently assigned to a third L1-VPN that is not part of the first group of L1-VPNs [col.8, lines 7-36, col.9, lines 10-47].
19. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Goode's teachings of a Fairness of capacity allocation for an MPLS-BASED VPN with the teachings of Dighe, for the purpose of providing fairness of capacity allocation in a network [col.6, lines 6, lines 25-36].
20. As to claim 15, Dighe does not explicitly disclose prioritizing results in a transfer of the network resource from the third L1-VPN to the first L1-VPN.
21. In the same field of endeavor, Goode discloses (e.g., Fairness of capacity allocation for an MPLS-BASED VPN). Goode discloses prioritizing results in a transfer of the network resource from the third L1-VPN to the first L1-VPN [col.7, lines 50-62].
22. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Goode's teachings of a Fairness of capacity allocation for an MPLS-BASED VPN with the teachings of Dighe, for the purpose of providing fairness of capacity allocation in a network [col.6, lines 6, lines 25-36].

23. As to claim 17, Dighe discloses the method of claim 9, wherein the step of allocating is done on demand [figure 1].
24. As to claim 18, Dighe discloses the method of claim 9, wherein the step of allocating allows network resources to be shared between multiple L1-VPN subscribers by allowing the same network resources to be allocated to more than one L1-VPN subscriber, one L1-VPN subscriber at a time [paragraph 0042].
25. As to claim 20, Dighe discloses the apparatus of claim 19, wherein the resources are optical network resources, and wherein allocated assigned resources are dedicated to only one L1-VPN while allocated [paragraphs, 0042, 0011].

### ***Conclusion***

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
27. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee

pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272- 3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **William Vaughn** can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thanh Tammy Nguyen/

Primary Examiner, Art Unit 2144

